

ABSTRACT

In a cell detecting part (2), an end face (13a) of a cantilever (13) is previously surface treated so that a detecting nucleotide chain D can be fixed thereto. In a reaction area (10), an electric field is generated by a cathode (11) and an anode (12). A target nucleotide chain T dripped from a nozzle (3) moves to the end face (13a) while the target nucleotide chain T is stretched. When the detecting nucleotide chain D and the target nucleotide chain T are hybridized, the mass of the cantilever (13) is increased to lower a natural frequency. Thus, ac voltage is applied to the cantilever (13) to measure the change of the natural frequency. Thus, whether or not there is the hybridization is detected and the number of the hybridized target nucleotide chains T is quantitatively detected.